

NOTE TO OUR READERS

Conservation Photo History





istory documents Missouri's conservation successes. The Department, working with individual citizens and many diverse partner groups, continues to advance on-the-ground conservation across our state. This photo editorial highlights significant forestry accomplishments since the late 1930s. A fundamental tenet of the Department recognizes that the hope of forest, fish and wildlife management and conservation in Missouri lies in the three-way cooperation of the agency, the landowner and the public—based upon adequate information and mutual understanding. Missouri's citizen-created Conservation Department is something to feel good about and something to value.

Rober Sigh



FEATURES

All the Other Stuff

by Matt Curry

Land management benefits more than your target species, and it expands your recreational opportunities.

Partnerships: The Cornerstone of Conservation IO

by Brett Dufur

The Conservation Department was created by a citizen-led effort to restore Missouri's fish, forests and wildlife 75 years ago. Since then, many conservation successes have been achieved thanks to partnerships.

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story and photos by Larry R. Beckett Missouri enthusiasts keep an ancient hunting partnership alive.

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Cover: Hickory Canyons Natural Area in Ste. Genevieve County by David Stonner. This area is owned by the L-A-D Foundation and managed by MDC.

Above: Painted Rock Conservation Area in Osage County by David Stonner

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LEGAL LEGACY

In his article, Missouri's Unique Conservation Legacy [November], Brett Dufur did an outstanding job describing our state's deep-rooted interest in preserving our natural resources. I would like to add a couple of footnotes to his excellent article.

As he stated, the Missouri Conservation Commission was created by constitutional amendment. The authority of this Commission was challenged in court and resulted in the landmark 1938 Missouri Supreme Court decision Marsh v. Bartlett. Mr. Marsh was charged with catching a large mouth bass in Dallas County during the closed season, was convicted and fined \$10.00. In upholding the constitutional amendment that created the Commission, the Missouri Supreme Court found that, in the exercise of its police power, the state could regulate and control game

and fish within the state, not for its own use as proprietor, but as a representative of the people in their united sovereignty. In following this decision, Missouri courts have uniformly recognized that the ownership of the fish in a Missouri stream belongs to the state until actually reduced to possession of an individual at a time and in a manner permitted by law.

The 1920 case of Hobart-Lee Tie Co. v. Grabner noted that in the beds of "Ozark streams, there are shoals and bars which furnish a happy camping ground for the erstwhile fisherman" and that in these "swift and beautiful" waters "an occasional rapid joins in the chorus of nature." State v. Wright (1919) noted that the Current River is a "fine fishing stream," and the 1954 case of Elder v. Delcour took judicial notice of the publicly known fact that "the Meramec River has long been known as a very popular

fishing stream." The 1973 case of Burk v. Colley acknowledged that the "cool, clear and sparkling waters" of the Current River are part of "many a float fisherman's fondest memory."

For 75 years, the Department of Conservation has been at the forefront of protecting our state's streams, forests and other natural resources which, as noted by the author and conservationist Leonard Hall in his book, Stars Upstream, are assets that "can shrink, but never grow."

W. Dudley McCarter,

former president of The Missouri Bar, Via Internet

DETAILS EXPOSED

Thanks to Noppadol Paothong for including the exposure information for the great photographs in his article *Eagles on the Mississippi* [December]. I don't expect you to include exposure info for every single photo that appears each month, but it's very nice to have it for what I will call "wildlife portraits" like these. Good job by the editors; great photography by Mr. Paothong!

Rick Headlee, Springfield

Brains and Humor

Chmielniak's cartoon in the November 2011 issue means a lot to me. Why? In the early '80s I was in the backyard with my son (then 5 or 6 years old) when a flock of geese flew over, honking and flying in a V. I was about to tell my son that geese always fly in a V when he said, "Look, Dad, they are flying in a SEVEN." Indeed they were. I have since noticed that geese rarely ever fly in a V; usually 7's, X's, W's, Y's and checkmarks, but rarely in a V. To this day, when I am dealing with someone who sees things differently than I do, I remember what my son taught me: Everyone sees things a little differently.

Claud Moore, Shell Knob

Trash talk

I purchased my Illinois land in 2005 and for several years tried to pick up all the trash that accumulates with annual floods. I wish people were more cognizant of what they put into our waterways. Thanks for drawing attention to this issue that affects everyone who enjoys our rivers and streams ["Agent Notes"; October].

Mike Billman, Prairie City, Ore.



Reader Photo

FROSTING

Wayne Severson, of Kissee Mills, photographed this frost flower on a ridge above Beaver Creek. These strange "blossoms" usually appear during the first hard frost of the year when moisture in a plant freezes and bursts out of the stem. When Severson found these frost flowers last year, he had never seen anything like them before, and thought it was some litter at first. When he got closer to pick it up, he realized it was an ice formation. "I was certain it was a once-in-a-lifetime event for me," said Severson. "Not so, as it seems to be an annual event here."



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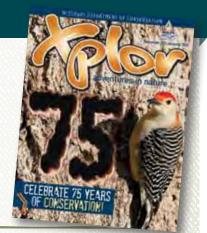
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Deer, Turkey Harvests Increase, Boost State Economy

Hunters checked more turkeys this fall than in 2010 and topped the 2010 November deer-harvest figure, too. The harvest upticks are evidence of healthy game populations that yield big financial benefits for Missouri.

Hunters checked 7,077 turkeys during the fall turkey season, a 19-percent increase from 2010. The increase confirmed that dryer weather last year enabled turkeys to recoup some of the losses suffered during the record flooding and cold springs of 2007-2010. Counts of young turkeys earlier in the year showed the best turkey nest success in a decade.

Hunters faced tough conditions early in the November firearms deer hunt, finishing the opening weekend with 10,000 fewer deer than in 2010. But they went on to check an impressive 190,089

deer by the end of the 11-day season, bettering the previous year's figure by nearly 1,900 deer.

Deer hunters also increased the number of antlered deer harvested during the November hunt. In 2003, antlered deer made up 37 percent of the November firearms deer harvest. Last year, 40 percent of the harvest consisted of antlered deer. This year, the figure was 43 percent. This increase began with implementation of the four-point rule for antlered deer in 2004.

The four-point rule, now in effect in all or parts of 69 counties, allows hunters to shoot an antlered buck only if it has at least four points on one side. The rule shifts extra harvest pressure onto does, making hunting a more effective tool for managing deer numbers. Increasing the number of mature bucks is a nice bonus for hunters.

Maintaining a stable, healthy deer herd benefits all Missourians, whether they hunt or not. Local businesses, such as motels, gas stations, meat processors and restaurants, benefit from deer hunters heading to the woods. All told, hunters from out of state spend approximately \$700 million on their sport. That spending generates more than \$1 billion in business activity and supports 11,000 Missouri jobs.

Bennett Spring Fishing Platform

Last September, the Missouri Conservation Heritage Foundation (MCHF) announced a fundraising effort to improve fishing and visitor access at a popular spot at Bennett Spring State Park. In a little more than three months, MCHF raised \$38,000 to improve the site just upstream from the park's scenic Fishing Bridge. The new platform will replace a deteriorating, unsightly concrete-covered bank with a 72-foot fishing and viewing platform. MCHF continues working to secure additional funds for the project. Donors of \$1,000 or more receive framed prints of the 1995 Missouri Trout Stamp signed and numbered by wildlife artist Chuck Witcher. A permanent plaque at the structure will recognize donors at two levels, \$1,000 and \$5,000 and above. Donations can be mailed to MCHF, PO Box 366, Jefferson City, MO. 65102-0366. Please reference Bennett Spring with your donation.

First Atlatl Deer Harvest

Luke Boenker made history on Nov. 12, 2011, using a piece of history.

Boenker, of Maryland Heights, became the first Missourian in modern times to harvest a deer with an atlatl, a primitive spear-throwing device dating back 400,000 years. He used an atlatl he made himself to "shoot" a four-point buck from a distance of 15 yards. He was hunting from a tree stand on private property in the vicinity of Clayton and Clarkson roads.

"It was the ultimate feeling," said Boenker.

The atlatl predates the bow and arrow. It is used to throw 4- to 6-foot-long, spear-like projectiles known as darts. It consists of a wooden shaft approximately 1.5 feet long with a socket or knock at the rear to engage the dart. Boenker made his atlatl of Osage orange wood. He assembled the dart using a 7-foot ash shaft and a broadhead tip.

The atlatl serves as an extension of the human arm, increasing the speed of thrown projectiles to nearly 100 mph. It became a legal method for taking deer in Missouri during the 2010 firearms deer season. Atlatls may be used during all but the muzzleloader portion of the firearms deer season.

Boenker, 54, has been hunting deer with firearms and archery equipment since age 16, but only took up the atlatl three months before his historic hunt, because he "wanted to do something different."

Scott Rorebeck of Trenton missed making history by one day. He shot a deer with an atlatl Nov. 13 in Grundy County.

For more information, visit **http://1.usa.gov/ vxNFXj**.

Ozark Hellbenders, a Missouri First

The Missouri Department of Conservation and the Saint Louis Zoo's Ron Goellner Center for Hellbender Conservation announced that Ozark hellbenders have been bred in captivity—a first for either of the two subspecies of hellbender. This decade-long collaboration has yielded 63 baby hellbenders.

The first hellbender hatched on Nov. 15, 2011, and approximately 120 additional eggs are expected to hatch. The eggs are maintained in climate- and water quality-controlled trays behind the scenes in the Zoo's Herpetarium. For 45 to 60 days after emerging, the tiny larvae will retain their yolk sack for nutrients and move very little as they continue their develop-

ment. As the larvae continue to grow, they will develop legs and eventually lose their external gills by the time they reach 1.5 to 2 years of age. At sexual maturity, at 5 to 8 years of age, adult lengths can approach two feet. Both parents are wild bred: the male has been at the Zoo for the past two years and the female arrived this past September.

Rivers in south-central Missouri and adjacent Arkansas once supported up to 8,000 Ozark hellbenders. Today, fewer than 600 exist in the world—so few that the amphibian was added in October 2011 to the federal endangered species list.

Due to these drastic declines, captive propagation became a priority in the long-term recovery of the species. Once the captive-bred larvae are 3



ASK THE OMBUDSMAN

My brother's son told him that he saw "red eyes" in the woods. My brother didn't believe him at first, but he later saw the same thing himself. What kind of animal has a red eyeshine from reflected light?

Likely Missouri candidates for red eyeshine are rodents or opossums. Some birds can produce a red eye reflection that is similar to eyeshine. Eyeshine comes from a layer of tissue in the back of the eyes of some vertebrate animals, called the tapetum lucidum. Animals with eyeshine are usually species that hunt at night, including cats, dogs, spiders and bullfrogs. The fact that light goes through the retina and then is reflected back through it again lets them make better use of available light to see better in the dark. The observed color of eyeshine can vary with the angle of reflection and with the source of the reflected light. Humans don't have a tapetum lucidum or eyeshine; the red-eye effect in photos is from a different process.

Why do many of the bird species that use my winter bird feeder show up at the same time? In early morning there is little activity, but in late morning

they all converge and fight over the food. If some would vary their routine, they could avoid the rush.

During the winter, birds tend to stay in foraging flocks, even flocks of mixed species. Their territorial instinct of the breeding season is temporarily forgotten during the winter. Flocks will move together, so when they are at your feeder they are all there together, and they leave together, too. The basis of the flock assembly is surely "safety in numbers" because it lowers the probability of an individual bird being caught by a predator. Flocking also increases the efficiency of the birds in locating food sources.



Ombudsman Tim Smith will respond to your questions, suggestions or complaints concerning Department of Conservation programs. Write him at PO Box 180, Jefferson City, MO 65102-0180, call him at 573-522-4115, ext. 3848, or email him at *Ombudsman@mdc.mo.gov*.

NEWS & EVENTS

to 8 years old, they can then be released into their natural habitat—the Ozark aquatic ecosystem.

Also known by the colloquial names of "snot otter" and "old lasagna sides," the adult hell-bender is one of the largest species of salamanders in North America, with its closest relatives being the giant salamanders of China and Japan, which can reach 5 feet in length.

With skin that is brown with black splotches, the Ozark hellbender has a slippery, flattened body that moves easily through water and can squeeze under rocks on the bottom of streams.

Requiring cool, clean running water, the Ozark hellbender is also an important barometer of the overall health of that ecosystem—an aquatic "canary in a coal mine."

"We have a 15- to 20-year window to reverse this decline," added Missouri Department of Conservation Herpetologist Jeff Briggler, who cites a number of reasons for that decline from loss of habitat to pollution to disease to illegal capture and overseas sale of the hellbender for pets. "We don't want the animal disappearing on our watch."

Eagle Days Coming Up

Missouri's winter eagle watching is spectacular as large numbers of our national symbol congregate along rivers, lakes and wetlands. You can discover nature at Eagle Days this month and next at the following MDC-sponsored events, which include guides with spotting scopes to view wild eagles, indoor programs featuring live eagles, exhibits, activities, videos and refreshments.

- **≫** Smithville Lake Little Platte Park Course Complex, Smithville, 9:30 a.m. to 4 p.m. Jan. 7 and 11 a.m. to 4 p.m. Jan. 8. For more information call 816-532-0174.
- **≫** Old Chain of Rock Bridge, St. Louis, off Riverview Drive south of I-270, from 9 a.m. to 3 p.m. Jan. 14 and 15. For more information, call 314-877-1309.
- >> Springfield Conservation Nature Center, Springfield, 9 a.m. to 4 p.m. Jan. 21 and 12:30 to 4:30 p.m. Jan. 22. For more information call 417-888-4237.
- **≫** Lock & Dam 24 and Apple Shed Theater with driving tour at Ted Shanks Conservation Area, Clarksville, 9 a.m. to 4 p.m. Jan. 28 and 10 a.m. to 3 p.m. Jan. 29. For more information call 660-785-2420.
- **>>** Schell City Community Center and Schell Osage Conservation Area, Schell City, from 9 a.m. to 4 p.m. Feb. 4. For more information call 417-876-5226.

For an Eagle Days brochure, visit **mdc. mo.gov/node/3478**.

Forest Nursery Still Taking Orders

It isn't too late to place tree and shrub seedling orders for spring delivery. The George O. White State Forest Nursery at Licking still has dozens of species of native trees and shrubs, plus seedling bundles for special purposes.

The 75th Anniversary Bundle consists of two seedlings of 10 species, including flowering dogwood, bald cypress, black walnut, white fringetree, red oak, white oak and shortleaf pine.

Another special deal this year is the extralarge nut-tree bundle with 30 trees all more than 30 inches tall. Species in the bundle are pecan, walnut and butternut. Besides the special

Whooping Crane Make Rare Visit

Becky Wylie of Neosho captured this image of a mature whooping crane, below, and its offspring Nov. 21, 2011 just north of her home town. She learned of the rare visit from the endangered birds after Jeff Richards discovered the birds while deer hunting and reported the sighting.

Conservation Education Consultant Jeff Cantrell hurried to the site and was amazed to find the cranes feeding in a crop field amid Canada geese and crows. He called the sighting "truly a heart-stirring moment."

Fewer than 500 whooping cranes remain in the wild. Sightings of the birds, which have wingspans of more than 7 feet, are rare in Missouri. MDC recorded sightings of a single bird at Mingo and Squaw Creek national wildlife refuges in 1958, a pair in Jackson County in 1970 and another single bird at Stockton Lake in 1996. The most recent sighting was of a group of whooping cranes with a flock of sandhill cranes in Bates County in October 2010.

Wetland areas in southeastern Missouri are great places to see migrating birds at this time of year. To find the best spots, use MDC's online Atlas Database, **mdc.mo.gov/atlas**.



bundle, the nursery has extra-large seedlings of nine species — red oak, bur oak, pin oak, shumard oak, black walnut, pecan, tulip poplar, butternut and bald cypress.

Two of last year's most popular bundles are back again. The Nut Tree Bundle has five each of five nut producing species. The Wild Edibles Bundle includes five each of 10 species that produce edible berries.

In all, the nursery has more than 70 species of trees and shrubs to help Missourians create wild-life habitat. Most bundles consist of 25 seedlings and cost \$8. Prices for the seven special bundles offered this year vary. For prices and ordering information, visit *mdc.mo.gov/node/3328*, or call 573-674-3229. The nursery accepts orders through April. However, many bundles and individual tree and shrub species will sell out before then. Orders are shipped starting in February.

Get Help Caring for Damaged Trees

Trees have had a rough go in Missouri over the past few years, with tornadoes, ice storms and even a derecho, a rare type of violent, straight-line windstorm. Winter, when foliage is off trees, is a good time to assess damage and repair or remove weather-damaged trees.

Safety should always be the first consideration when undertaking such work. You also want to be sure you keep any salvageable trees, but you don't want to waste effort and years of time on trees that are unlikely to recover fully. You can find advice on these and other related matters in MDC's *Guide to Tree Care After Storms* at *mdc.mo.gov/node/5224*. The document walks you through such topics as proper pruning techniques, how to salvage downed timber for commercial use, how to choose a qualified arborist or tree harvester and how to plant and care for new trees.

Fuels for Schools

In October, six Missouri schools celebrated moves toward the use of renewable energy to heat their facilities. State Forester Lisa Allen and other state officials traveled across southern Missouri to hold ribbon-cutting ceremonies commemorating new heating systems built with funds from the Missouri Fuels for Schools program.

The schools received a total of \$6 million in

Did You Know?

We work with you and for you to sustain healthy forests, fish and wildlife.

Conservation Agents

- » Conservation agents' mission: to protect and conserve Missouri fish, forest and wildlife resources and to serve citizens through a coordinated program of resource law enforcement, education, information and one-on-one contacts.
- » More than 660,000 Missourians were contacted and 117,672 phone calls were answered last year by agents as part of their community relations efforts.
- **» 6,528** radio and television programs, **3,034** newspaper articles and **1,297** public exhibits were produced last year by agents to educate and inform the public about conservation.
- **» At 4,784 meetings** with civic groups, schools and a wide variety of other organizations conservation agents represented MDC.
- **» 187,525 hunters and anglers** were contacted by conservation agents last year to ensure compliance and to provide regulation information.
- **» 25,900** resource violations were noted, **3,218** warnings were written and **7,285** arrests were made last year from contacts with hunters and anglers.
- **» 17,281** resource management contacts were made by agents last year. Those contacts included assisting landowners with wildlife nuisance and damage problems.
- **» Hunter education:** conservation agents work with MDC staff and approximately 1,400 volunteer instructors to coordinate hunter education courses in all 114 Missouri counties.
- » Share the Harvest: conservation agents and the Conservation Federation of Missouri coordinate the Share the Harvest program, in which hunters may donate deer meat to those in need through established charitable organizations. In 2010, approximately 5,731 hunters donated 305,643 pounds of venison to needy Missourians. Since the inception of the program, nearly 2.1 million pounds of deer meat have been donated to Missouri citizens.

USDA Forest Service grants, which were funded through the American Reinvestment and Recovery Act (ARRA). Grant recipients were the Gainesville R-V School District, Mountain View-Birch Tree Liberty High School, Eminence R-I Elementary School, Southern Reynolds County R-II School District, Steelville R-III School District and Perry County School District 32.

Besides reducing heating costs and dependence on fossil fuels, Fuels for Schools helps keep Missouri forests healthy.

"Healthy woods require care to maintain their growth and productivity," said Allen. "However,

historically it has been difficult for Missouri's woodland owners to economically thin young trees because the trees being cut and removed had little commercial value," Allen explained. "It is our hope that woody biomass burning boilers like the ones installed by the Fuels for Schools program will create a market that will entice landowners to improve forested areas by thinning the trees. Such actions will also enhance wildlife habitat, potentially expand the forest products industry and support the local economy."

For more information, visit *missourifuels forschools.totorcd.org*.

All the Other Stuff

Land management benefits more than your target species, and it expands your recreational opportunities.

SIX YEARS AGO, Wendall Bolin said there were essentially no quail left on his farm. He and his grandfather had hunted quail on the Greene County farm his entire life. He knew that the changes made to the land were responsible, and he wanted help to create a quail management plan.

Wendall is a cattleman who also trains horses and dogs. His 200-acre farm was primarily grass, with the exception of a wooded drainage that split the property. At the time, only quail, rabbits and coyotes had ever been hunted on the property. There were no deer or turkeys on the place.

We planted native grasses, shrubs, grain plots and a riparian buffer (the area along a stream bank that contains native grasses, flowers, shrubs and trees). We also put up fencing to exclude livestock. Quail numbers increased, and Wendall and his dogs now have many coveys to hunt. But that's not the end of the story.

Birds

The first thing Wendall noticed as the new land management practices were put in place was the increase in the variety and number of songbirds. During a visit, he described several birds and asked if I knew what they were. During my next visit he had a bird book on the dash of his truck and was talking freely about all of the different grassland birds he and his wife had seen, as well as nesting great horned owls and barred owls. "I knew we would have more quail, but I am a little surprised by all the other stuff," said Wendall.

Rabbits

Wendall doesn't think he's hunting unless he's chasing a dog. When I met him, he had running dogs and bird dogs. Now, due to a very high rabbit population, he is breeding and training beagles. Rabbit chases are one of the most common practices on the farm. His family and friends gather often to run their beagles—daily, if the weather permits.

Deer, Turkey and Bobcats

Wendall's boys have started bowhunting. Last year by using trail cameras they documented seven bucks—on land that previously had no deer. They now also have nesting turkeys, and bobcats are seen regularly. The species list goes on and on.

When I met with Wendall the other day, I could hear a rabbit chase in the background, and he had a bird dog pup in the back of the vehicle. We were discussing some management strategies when he interrupted with "let me show you my new project." He pulled out his phone and showed me a video of a new squirrel dog he was training.

We achieved Wendall's goal to increase quail numbers, but the benefits from the land management practices have greatly exceeded that original plan. For Wendall, his family and friends, "all the other stuff" has provided a growing list of new outdoor activities to enjoy.

—Story by Matt Curry, photo by Noppadol Paothong





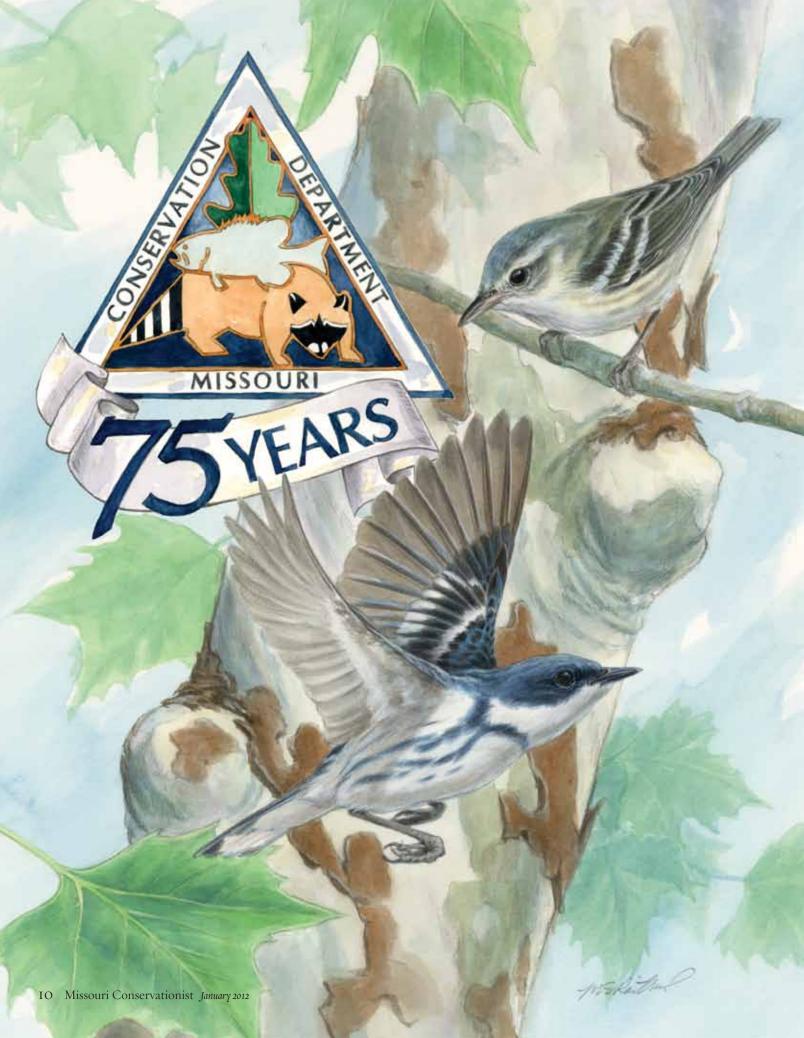


ILLUSTRATION BY MARK RAITHEL

Partnerships: The Cornerstone of Conservation



The Conservation Department was created by a citizen-led effort to restore Missouri's fish, forests and wildlife 75 years ago. Since then, many conservation successes have been achieved thanks to partnerships. This article highlights some of our important partners in conservation. Many others will be highlighted as this 12-part series continues.

by BRETT DUFUR

EAMWORK OFTEN BEGINS WITH A HANDSHAKE: friends helping friends and neighbors helping neighbors. That same spirit is at the heart of Missouri's conservation community, which includes thousands of individuals making a difference for Missouri's fish, forest and wildlife in their own unique way.

Conservation partnerships create a sum that is greater than its parts. Working together leverages the limited resources available to benefit the most wildlife species and habitat. Partnerships are vitally important for conservation to work in Missouri, because the Conservation Department is relatively small compared to other state agencies. MDC's entire budget is less than 1 percent of the entire state government budget. No money from the state's general revenue goes to the Department. Partnerships are able to extend the reach of conservation work into areas that would otherwise be impossible.

"The management of Missouri's fish, forests and wildlife involves partnerships with citizens, organizations and other agencies," says MDC Director Robert L. Ziehmer. "We value citizen involvement, which truly serves as the backbone of Missouri's conservation successes."

TWO IMPORTANT PARTNERS: THE FEDERATION AND THE FOUNDATION

Two important partnerships in conserving fish, forest and wildlife resources are the Conservation Federation



Missouri Stream Teams wouldn't be possible without the help and coordination of the Conservation Federation of Missouri. The Federation is the state's oldest and largest private citizen conservation organization.

of Missouri and the Missouri Conservation Heritage Foundation. These groups enhance the work of conservationists throughout the state. Other important partnerships involving volunteers, state and federal agencies, and other conservation organizations are highlighted throughout this article.

ALL MISSOURIANS CONTRIBUTE TO Conservation Success



he teamwork of tens of thousands of Missourians to improve Missouri's natural resources is remarkable. Volunteers donated more than 273,000 hours last year in MDCsponsored conservation efforts. Dedicated Missourians donated their time through conservation nature centers, shooting ranges, hunter and bowhunter education, protection, Master Naturalists and Stream Teams, MDC also works with more than 24,000 landowners in the state through a variety of programs to improve their property to benefit wildlife.

Pat Jones visits Prairie Fork Conservation Area that she and her late husband, Ted, donated to MDC.

Every Missouri hunter and angler is also an important partner in conservation. For more than 75 years, hunting and fishing license revenues have been vital to restore habitat, purchase public lands, and bring back Missouri's fish and wildlife. When a person purchases a hunting or fishing license, they are investing those dollars in conservation for the benefit of all Missourians and future generations.

And in the end, every Missourian is a partner in conservation thanks to the conservation sales tax, which allocates 1 penny to conservation efforts for every \$8 of taxable items purchased. This dedicated sales tax provides consistent funding for the long-term efforts required for the conservation of fish, forests and wildlife.



CONSERVATION FEDERATION OF MISSOURI

Up until the early 1900s, natural resources were thought of as something that might eventually disappear. Early fish and wildlife management approaches attempted to stretch out dwindling resources, rather than to improve wildlife populations and create habitat. Then, in the early 1900s, President Theodore Roosevelt recognized "conservation through wise use" as a public responsibility, and recognized science as a tool for fulfilling that responsibility.

A new era of conservation-minded leaders, sportsmen and citizens were beginning to form a strategy to bring back wildlife. On Sept. 10, 1935, nearly 100 forward-thinking Missourians gathered at Columbia's Tiger Hotel to discuss the sad state of Missouri's fish, forests and wildlife. They formed the Conservation Federation of Missouri and launched a movement to revolutionize natural resource management.

They worked tirelessly to put a proposal for a new science-based Conservation Commission on the ballot.

A recent sizeable donation to the Missouri Conservation Heritage Foundation allowed MDC to purchase 171 acres in the LaBarque Creek watershed, shown above, to ensure long-term protection and public use of the area.

On Nov. 3, 1936, voters approved the measure by one of the largest margins by which any amendment to the state constitution had ever passed.

On July 1, 1937, the constitutional amendment creating the Missouri Conservation Commission took effect, and with it the Department of Conservation (MDC) was formed. This new Department had constitutional authority for the management of Missouri's forests, fish and wildlife. Over the next 75 years, the "Missouri plan" allowed the Show-Me State to build what is acknowledged as one of the nation's top conservation programs.

But the Conservation Federation of Missouri didn't stop there. From the original 100, its ranks have grown

to tens of thousands. The Federation became known as "the strong right arm of conservation."

"That engagement of citizens in conservation is what it's all about. The bottom line of one of President Roosevelt's most succinct comments is that, 'Wildlife and its habitat cannot speak, so we must, and we will," says Dave Murphy, executive director of the Conservation Federation of Missouri.

Today, the Federation continues to actively lead and support conservation efforts in Missouri and throughout the nation. It is the state's oldest and largest privatecitizen conservation organization, with more than 90,000 individuals and 80 affiliated groups.

Since its successful early efforts, the Federation has undertaken many other battles to ensure that Missouri remains the nation's conservation leader. In 1976, it spearheaded a successful citizen initiative for the oneeighth of 1 percent conservation sales tax. This dedicated sales tax provides stable funding for the long-term efforts required for the conservation of fish, forests and wildlife.

"The wildlife of our state belongs to every citizen. This really has been underscored by the passage of the Design for Conservation sales tax in 1976 that formally made every citizen of our state an owner/operator, not only of wildlife but of conservation," Murphy says. "And we have the many benefits of that, economically and otherwise. But we also have a responsibility for caring for it, and understanding it, and making sure that it continues in the future."

To ensure that conservation remains a reality in Missouri, the Federation continues to operate as a watchdog. The Federation's members work to enhance the future of their favorite outdoor traditions through



Since it began administering the Stream Stewardship Trust fund in 2000, the Missouri Conservation Heritage Foundation has raised and dispersed more than \$3 million for priority stream protection efforts, such as the Niangua Darter, shown above, which is found only in Missouri.

internal committees that advise government agencies and represent conservation interests in the Missouri Legislature and Congress. But the Federation isn't all about lobbying and constitutional amendments.

Over the years, the Federation has helped to develop and coordinate some of the most innovative and successful citizen-action programs in the world, including Missouri Stream Teams, Operation Game Thief, Project Forest Arson, Share the Harvest and the annual Conservation Leadership Corps. These opportunities have allowed Missourians to get involved in conservation and have served as models for other states.

Like the 100 sportsmen who came together back in 1935 to define conservation, today's Federation members

ORGANIZATIONS PARTNER FOR CONSERVATION SUCCESS

ome of MDC's partners work on continental-scale conservation, like Ducks Unlimited, the U.S. North American Bird Conservation Initiative and Partners in Flight. Other partners, such as Joint Ventures and the Association of Fish and Wildlife Agencies, take a more regional approach. Some MDC partners work on specific groups of species or specific habitats, such as Audubon Society, Quail Forever, Trout Unlimited, the National Wild Turkey Federation, the Rocky Mountain Elk Foundation and The Nature Conservancy, to name but a few. Still other partners focus specifically on conserving habitat for Missouri fish and wildlife, such as the Missouri Prairie Foundation, Missouri Bird Conservation Initiative, Missouri Stream Teams, Master Naturalists and many more.

All of these diverse organizations, plus many others, work together with Missourians in a meaningful way to encourage conservation where it is needed most.

"Partnerships between government and citizen conservation groups make it possible to achieve things beyond our separate means. It is a model that has proven successful time and time again and is responsible for Missouri's and America's—greatest conservation success stories," says MDC Director Robert L. Ziehmer.

AGENCIES PARTNER FOR CONSERVATION SUCCESS

DC also partners with state and federal agencies. Missouri state agency partners include the Department of Agriculture, Department of Transportation, Department of Natural Resources, the Highway Patrol and others. Federal partners include the U.S. Fish and Wildlife Service, the U.S. Forest Service, the U.S. Army Corps of Engineers, the U.S. Department of Agriculture and the National Park Service.

Through the Farm Bill, the U.S. Department of Agriculture administers the Wetlands Reserve Program (WRP) and Conservation Reserve Program (CRP) to help Missouri's landowners protect, restore and enhance wildlife habitat. Missouri is one of the top ten states in the nation in acres of habitat conserved in both programs.

Another important federal partnership is with the U.S. Fish and Wildlife Service. MDC receives funds from the Wildlife and Sport Fish Restoration programs, which are also celebrating 75 years of success. Federal excise taxes paid by sportsmen and fishermen in the state on firearms, ammunition, archery equipment, fishing tackle, motorboat fuel, electric outboard motors and sonar equipment are returned to MDC to restore, conserve, manage and enhance fish and wildlife, develop motorboat accesses and shooting ranges, and to help fund angler, hunter and aquatic resource education.

are average citizens. Yet, they have the satisfaction of making conservation history.

MISSOURI CONSERVATION HERITAGE FOUNDATION

Even with the work done by the Conservation Department, the Conservation Federation of Missouri and many other groups, the opportunities to conserve fish, forests and wildlife are never-ending. The resources needed to meet those challenges, however, are not.

Conservation takes funding, and funding is always a challenge. That's where the Missouri Conservation Heritage Foundation steps in—to help fund many conservation and conservation-related outdoor recreation projects that might not happen otherwise.

"The conservation community in Missouri is well coordinated. This allows the most habitat and species to benefit from their work," says Rick Thom, executive vice president of the Missouri Conservation Heritage Foundation, "and allows the conservation community to leverage the relatively small amount of funds available to conserve nature in Missouri."

The Foundation is separate from MDC, but supports its mission. "By working with MDC staff who have identified areas of greatest conservation priority, we fund projects that address immediate conservation and outdoor-recreation needs," Thom says.



Parterships between MDC and other state and federal agencies double the efforts of restoring, conserving, managing and enhancing fish and wildlife in Missouri.

"Missourians are fortunate to have the conservation sales tax to help fund worthy projects and activities," says Thom, "but sales tax revenues cannot always keep pace with needs. This is why the Foundation was created—to provide an additional stream of revenue for conservation, and to provide donors with an easy way to contribute to conservation projects and initiatives that are important to them."

One of the Foundation's first projects was to raise \$3.6 million to aid in the construction of the Anita B. Gorman Conservation Discovery Center in Kansas City. Today, the nature center hosts more than 31,500 students and visitors annually.

The Foundation has partnered with other conservation groups to fund many other projects, as diverse as the outdoors. With the help of several sizeable donations and the Foundation's Stream Stewardship Trust Fund, the Foundation helped invest more than \$2 million to protect land in the 8,365-acre watershed of LaBarque Creek in Jefferson County. This remarkable stream supports an astonishing 44 fish species. In addition, the surrounding area provides outdoor recreation opportunities and wildlife habitat only a short distance from St. Louis.

In another project, the Foundation granted \$55,500 to help The Nature Conservancy, the Central Hardwoods Joint Venture and MDC acquire 80 acres of important

MDC is a member of the Avian Conservation Alliance, whose projects include habitat protection, restoration and bird monitoring in Mexico and Central America.

bird habitat along the Current River, one of North America's most biologically diverse streams.

The Foundation is also a partner of the Avian Conservation Alliance, which includes seven Missouri Audubon chapters and MDC. Partnerships, like migratory birds, can span continents. By working together, these partnerships ensure that "our birds" return each spring. Current projects focus on habitat protection, restoration and bird monitoring in Mexico's Yucatan Peninsula near Cancun, and in Central America.

The Foundation is funded by sales of Conservation Heritage license plates, private and public grants, and individual donations. In addition, the U.S. Army Corps of Engineers, when enforcing the Clean Water Act, can assess fines to developers who damage Missouri streams. Those fees can be deposited into the Foundation's Stream Stewardship Trust Fund for stream protection and restoration projects.



CELEBRATING PARTNERS ALL YEAR

any important conservation partnerships will be highlighted in the Conservationist during MDC's yearlong celebration of its 75th anniversary. The December Conservationist highlighted the lasting contributions of Ducks Unlimited to continental-scale waterfowl conservation success. This article highlights the important role of Missouri's largest membership-driven conservation group—the Conservation Federation of Missouri, as well as the Missouri Conservation Heritage Foundation, which funds conservation work throughout the state.

Future issues will feature important partnerships such as:

- February: Missouri's Rural Fire Departments, Missouri Forestkeepers Network, Forest Releaf of Missouri, Missouri Community Forestry Council and the National Arbor Day Foundation
- March: Trout Unlimited
- April: National Wild Turkey Federation and the Rocky Mountain **Elk Foundation**
- May: The Nature Conservancy and the Missouri Prairie Foundation
- June: Stream Teams and the Department of Natural Resources
- July: U.S. Department of Agriculture Natural Resources Conservation Service and the LAD Foundation
- August: Nature center volunteers and hunter education instructors
- September: University of Missouri—Columbia and Missouri **State University**

Founded in 1997, the Foundation has provided more than \$12 million for conservation and outdoor recreation. In 2011, it funded 24 projects totaling more than \$108,000.

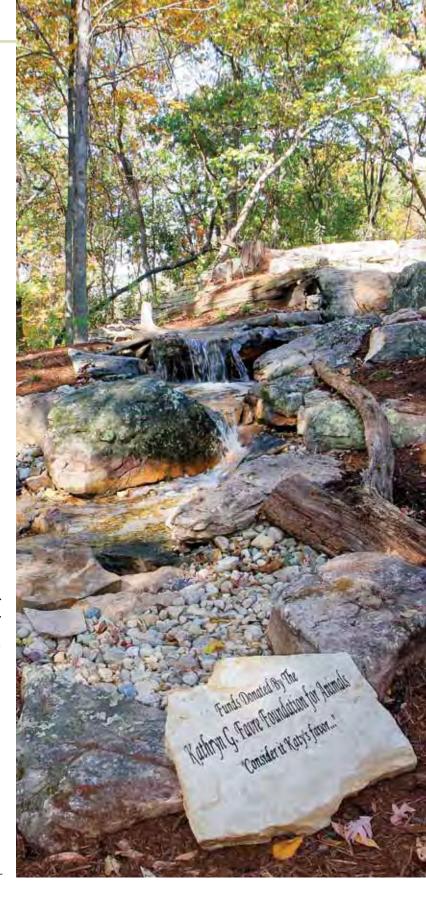
Missourians who want to support conservation but don't know where to start can choose from a number of categories set up by the Missouri Conservation Heritage Foundation. To invest in your conservation legacy, direct donations to activities or programs you find meaningful.

"The Foundation provides a way for people to protect the places they love or to promote an activity, such as fishing, that has provided a lifetime of fulfillment," says Anita B. Gorman, former Conservation Commissioner.

To learn more about the Foundation, visit mochf.org or call 1-800-227-1488.

MISSOURIANS CARE ABOUT CONSERVATION

Like most investments, the steps on the road to conserving Missouri's forest, fish and wildlife resources are small and numerous, slowly building over many years or decades. Yet, Missourians have not lost sight of the long-term returns that conservation efforts will yield for generations to come.



With the help of the Missouri Conservation Heritage Foundation, the Kathryn Favre Foundation for Animals donated a new waterfall to the Powder Valley Nature Center near St. Louis.

Missouri enthusiasts keep an ancient hunting partnership alive.

story and photos by LARRY R. BECKETT

VERY TIME WE STEP OUTSIDE, THERE IS AN OPPORTUNITY TO ≺ see something that we have never seen before. Sometimes you ✓ have to look to find it, but in my 25 years of outdoor obsession I have rarely been disappointed. On this particular day, I stood next to Meagan Duffee, a falconer from Nevada, Mo., and watched a red-tailed hawk loosen his powerful talons from her leather gauntlet-covered arm and fly to a nearby limb. I knew I was in for something special.

Falconry is the art of training raptors to capture wild game, and it can be traced back to 700 BC. Yet it remains one the most mysterious,

> and often misunderstood, forms of hunting. Technically, falconry and hawking are two separate activities based upon the type of bird flown, but both are more commonly referred to as falconry. I find myself all too often immersed in a society that seems to prefer to keep the outside out and the inside in, so when I was invited to get up close and personal with raptors and tag along on a hunt with Duffee and Tom Schultz, president of the Missouri Falconers Association, I "flew" at the chance.

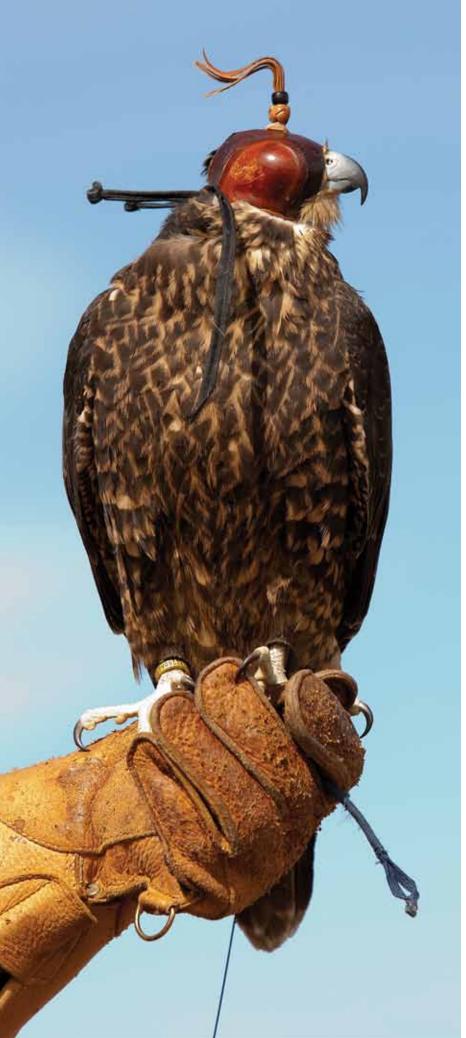


Leather falconry hoods are used in the training process and keep the raptor in a calm state.

The Hunt

We started the day working Duffee's female red-tailed hawk, Autumn, along the tree line next to a local prairie in search of rab-





bits. Duffee and Schultz kicked brush piles as Autumn kept a close eye on them and followed along, flying limb to limb. "It's a partnership," said Duffee. "She trusts me and knows that if she hangs around me long enough, I can kick game up for her." We didn't turn up any game on this pass, but Duffee and Autumn both had that "we'll get them next time" look in their eyes as the hawk returned to Duffee's outstretched arm.

Then Schultz, an O'Fallon resident and falconer for 39 years, brought out his peregrine falcon, a species that only hunts other birds. If there were any quail hiding on the prairie, we were determined to find them. Unlike the limb-hopping method of the hawk, the falcon circles overhead waiting for the game to flush and then stoops (folds its wings and dives at its prey).

"The falcons that I fly will circle at about 800-1,000 feet," said Schultz. "If we are by a pond, the bird will circle and pin any ducks on the pond until I can get over there and flush them for the bird. We are basically the dog for them." Falcons can stoop at speeds more than 200 miles per hour and will hit the game in midair. "A few years ago, The North American Falconers Association put devices on falcons to measure G-force," said Schultz. "In a stoop, they were exceeding a force of 25 G's."

Our search for quail ended as empty-handed as the rabbit quest, but it was still fascinating to watch. We weren't giving up yet. We decided to drive to a patch of timber behind a local mall. It was a tangled mess of ice-broken trees, brush piles and arm-thick vines. We were certain there would be a few squirrels in there.

Becoming a Falconer

As we traveled, Schultz explained what it takes to become a falconer. "There are three classes of falconers: apprentice, general and master," said Schultz, a master falconer. Since falconry involves the use and care of a living animal, becoming an apprentice involves more than just buying a permit. "An apprenticeship is a two-year program where you are sponsored by

Falconry birds need to be flown every day during the hunting season and properly cared for all year.



someone who is a general or master falconer. You have to find a sponsor willing to take on an apprentice, build a mews (housing for the raptor), have the mews inspected and pass a written test. Then you can apply for the permits."

"Falconry is one of the most highly regulated sports," said Schultz. "Currently, you must have a permit from the state and federal government. An apprentice can only have one bird, and it must be a red-tailed hawk or an American kestrel, as they are very common and more easily trained than other species. After the two-year apprenticeship, and with sponsor approval, a falconer achieves the status of general class. This allows you to have two birds of any species that are not endan-

gered or threatened," said Schultz. "Then after five years as a general class, you can become a master falconer and can have up to three birds of any species." The Missouri Department of Conservation keeps close tabs on the birds. Periodic visits by conservation agents ensure that the birds are well cared for and that the standards are being met.

As Schultz's apprentice, Duffee spoke more about the benefits of a sponsor. "Your sponsor is going to teach you everything you need to know about falconry and show you how to make equipment, but they are also there for moral support," said Duffee. "They are like a mentor. They show you what to do and how to understand your bird. If my bird acts a weird

Meagan Duffee is in the first class of falconers, an apprentice. After her two-year program, Duffee will have to build a mews, have the mews inspected and then pass a written test just to apply for the falconry permit.

way that I have never seen before, I call Tom and ask him what is going on. It's usually a behavior that is completely normal, but I have to reassure myself."

The sponsor also ensures that the aspiring falconer knows what he or she is getting into. "When someone watches us hunt, they usually don't realize all of the time, work and commitment that has gone into training and caring for that bird," said Schultz. "You have to fly your bird every day during the season and make sure it is getting the proper care all year," added Duffee. "If you keep your bird for the summer, you can't go on vacation. It's not like a hunting gun. You don't just clean it and put it up. It's a living creature."

Public Response

Raised in a time and place where raptors were most often considered "good-for-nothing chicken hawks," I was anxious to hear what type of reaction Schultz and Duffee got from the public. "Falconry is historically a reclusive sport," said Schultz. "When I first got involved, falconers were very reluctant to even let people know that they had these birds. That has all changed and falconers have become more social and open to

FALCONRY REGULATION CHANGES

The Missouri Falconers Association has been working with the United States Fish and Wildlife Service (USFWS) and the Missouri Department of Conservation on falconry regulation changes for Missouri. "The USFWS is the main organization governing falconry in the United States, and we get our authority to regulate falconry through them," said Kurt Kysar, protection field chief for the Missouri Department of Conservation. "A few years ago, they announced that they wanted to revamp the falconry regulations that we currently operate under. They wanted to eliminate the need for falconers to have both a federal and a state permit and also gave us a set of standards that we had to adapt to our regulations."

A committee was formed that included MDC Protection Division and Resource Science Division employees, as well as members of the Missouri Falconers Association. They began meeting in the spring of 2009 and compiled a new set of regulations and a new test for aspiring falconers. "The changes would eliminate the federal permit, but we also clarified some rules and made it easier for falconers to operate while still protecting the birds," said Kysar. "We hope with the regulations being easier to understand, we can get more people interested in falconry."

The regulatory changes took effect March 1, 2011. A complete listing of falconry regulations is available upon request from MDC, or they can be found online in Chapter 9 of the Wildlife Code of Missouri at www.sos.mo.gov/adrules/csr/current/3csr/3csr.asp.



Radio tracking can be used to locate a bird that has flown out of sight of the falconer.

the public, because the public has become a lot more receptive to falconry. Most people who see me with my bird are curious and ask a lot of questions. When looking for new places to fly the birds, I always invite the landowner to join me on the hunt and watch."

As we reached the wood lot behind the mall, and Duffee placed Autumn once again on her leather gauntlet, I could hear the excitement in her voice. "My favorite game to go after is squirrel," said Duffee. "With rabbits, you walk and you hit brush. Squirrel hunting is more threedimensional. It's more of a challenge for me and my bird, because you have to keep the squirrel running. The bird has to figure out the best way to catch the animal."

We approached the timber and began maneuvering our way through the maze of woody obstacles. It wasn't long before we saw a flash of red scurrying along a limb high in a hickory tree. Autumn flew to a limb on a nearby tree and watched intently as Duffee worked her way around it. As planned, the squirrel scampered to the other side. Autumn's



response was immediate. She dropped from her perch and sliced through the air with complete silence. At the last second, she leaned back and extended her talons in preparation for snatching the prey, but the old red squirrel moved just in time. Autumn flew to another tree to regroup, saw where the object of her attention had gone, and made another attempt. Once again, the prey escaped.

Autumn retreated and waited. Her piercing stare was apparently more than the squirrel could handle. It ran to the end of a limb and leapt through the air. Autumn stooped quickly and attempted to interrupt the squirrel's 20-foot free fall into the brush pile below, but the bushytail made it to the cover. Despite the

hawk's head-first dive into the brush, the squirrel emerged from the other side, ran up a tree and into a hole. The old red squirrel had won this time, but barely.

What a thrilling experience. And as we walked out of the timber, I found myself once again saying, "Well, I never saw that before!" I've discovered that there's no limit to new adventures in Missouri's outdoors. I hope you will find the same.

For more information on falconry in Missouri, visit the Missouri Falconers Association website at www.missourifalconersassociation.org or contact the MDC regional office in your area (phone numbers on Page 3).

It is necessary for the falconer to have the time and patience to pursue falconry.

FISCAL YEAR 2010-2011 Report

his summary of the Annual Report highlights the Missouri Department of Conservation's accomplishments and expenditures from July 1, 2010, through June 30, 2011. These accomplishments are based on the nine goals established in The Next Generation of Conservation. Not only does this summary highlight the accomplishments of the Department, but it emphasizes that Missourians care about conserving forests, fish and wildlife; that we work with Missourians and for Missourians to sustain healthy forests, fish and wildlife; that we help people discover nature; that conservation makes Missouri a great place to hunt and fish; and that conservation pays by enriching our economy and quality of life.



Conservation Education

Discover Nature Schools

In 2011, more than 78,000 Missouri children were connected with nature through various Discover Nature Schools instructional units and grants. Thus far, 95 school districts adopted the elementary habitats unit, 115 districts taught the middle-school aquatic unit and 24 districts adopted the high school ecology unit. An additional 76 schools engaged students in learning about Missouri's fish, forest, wildlife or natural habitats through our Conservation K-3 Field Trip Grant. This year a kindergarten through second-grade unit was completed, and a pre-kindergarten unit is in development. Conservation grants supporting Discover Nature Schools totaled \$268,909.

Xplor kids' magazine

Targeted to Missourians age 7–12, *Xplor* magazine aims to connect kids with nature using fun, interesting stories, art and photography. The free bimonthly magazine and companion website were launched in February 2010. At the end of FY11, subscriptions to the magazine were at 80,000 and are slated to surpass 100,000 in the first quarter of FY12.

Social media

Social media plays an increasing role in sharing MDC information with Missourians. The Department's Facebook page reaches almost 1.5 million people per month from more than 33,000 fans who then share our information with their hundreds of thousands of online friends. Our Twitter feed has more than 1,600 followers who then pass MDC tweets along to thousands more. MDC's YouTube channels average about 140,000 views per month with more than 5 million total views. MDC online photos through Flickr offer about 1,500 images, which have had more than 25,000 views.



Plants & Animals

Elk restorationn

Wild elk returned to Missouri after an absence of 150 years. On May 5, 2011, after all requirements of the health protocols were met, six bull elk and 28 cows and calves arrived at Peck Ranch Conservation Area (CA). This 23,000acre conservation area is within the 346-square-mile elk restoration zone that encompasses parts of Carter, Shannon and Reynolds counties. The elk were captured in December 2010, and January 2011, by MDC staff in cooperation with biologists from the Kentucky Department of Fish and Wildlife Resources and the Virginia Department of Game and Inland Fisheries. The elk restoration plan includes monitoring elk movements, habitat use, and demographics, and addresses situations when elk move onto land where they are not welcome. Automobile routes have been opened on Peck Ranch CA to allow visitors to view free-ranging elk.

Black bear research

MDC, in cooperation with Mississippi State University and with funding from the Federal Aid in Wildlife Restoration Act, began the first ever black bear research project in Missouri. A total of 13 black bears were captured and fitted with GPS radio collars across the southwest portion of the state. All captured bears were outfitted with ear tags for identification. The average weight of adult male bears was 321 pounds. The average weight of adult female bears was 185 pounds.

Feral hog eradication

Since 2009, MDC has captured 502 and euthanized 486 feral hogs as part of the eradication effort. Eleven hogs were captured and released with tracking collars to provide information about their movement, which also aids in developing effective eradication plans.



Community Conservation

Venison donation

Conservation agents coordinate and support the Share the Harvest program with the Conservation Federation of Missouri, local charitable organizations and local meat processors. Together, these groups have supported the donations of more than 256 tons of meat during the past two years. In FY11, approximately 5,731 hunters donated 305,643 pounds of venison to less-fortunate Missourians.

Firewise Communities

The nine communities of the Redings Mill Fire Protection District are the first in Missouri to be recognized as Firewise Communities/USA. This is a National Fire Protection. Association program co-sponsored by the U.S. Forest Service, the U.S. Department of the Interior and the National Association of State Foresters. The goal is to promote the use of technology, policy and practices that minimize the loss of life and property to wildfire, independent of firefighting.

Community tree care

Interest in the Tree Resource Improvement and Maintenance cost-share program continues to be strong as Missouri towns have experienced numerous severe weather events. In FY11, MDC spent \$206,386 funding 31 chosen applications. Applicants matched the MDC contribution by 48 percent providing \$194,059 in local match.



Outdoor Recreation

New hunters and anglers

MDC and volunteers provided more than 2,030 programs on hunting, fishing, trapping and shooting sports. More than 114,000 people took part in these programs. We offered about 877 Hunter Education classes and certified 22,852 students. More than 130,000 visitors attended programs or practiced firearms and archery shooting at our five staffed shooting ranges and 75 unmanned shooting ranges.

Quick Draw piloted

MDC piloted a new draw system for waterfowl hunters on three of 15 conservation areas that offer managed waterfowl hunting. Called Quick Draw, MDC conducted this Internetbased draw system twice a week during the waterfowl season to allocate hunting opportunities at three conservation areas: Eagle Bluffs, Grand Pass and Otter Slough. Quick Draw results were discussed and evaluated following the waterfowl season and will be used again for the upcoming season on the same three waterfowl areas.

Catfish

Blue catfish sampling continues on both Lake of the Ozarks and Truman Reservoir. Information is being collected to determine the population structure and growth rates of blue catfish. A companion tagging study is also underway. These data will be used to manage catfish these reservoirs.



🚢 Clean Water

Stream Teams

Missouri Stream Team grew to 4,321 teams (85 percent still active) statewide in 2010. A total of 146,361 hours were volunteered to enhance and restore Missouri streams.

Mississippi River monitoring

Through a cooperative effort among the U.S. Army Corps of Engineers, U.S. Geological Survey and states in the upper Mississippi River basin, long-term trends in fisheries, water quality, invertebrates, forest resources, land use and land cover for the entire upper river system are monitored. This work is done through a network of state-operated field stations. In Missouri, the Big Rivers and Wetlands Systems Field Station monitors conditions in the 25 river miles both north and south of Cape Girardeau. The program is involved in answering questions that come from analysis of waterquality and fisheries data that the field station collects.

Stream Stewardship Trust Fund

The Stream Stewardship Trust Fund is available to restore, enhance and/or protect stream systems and associated riparian habitats. The program and funds are administered by the Missouri Conservation Heritage Foundation, and MDC applies for grants. In FY11, four projects totalling \$158,585 were approved to protect Missouri's stream and riparian corridors.



🔯 Landowner Assistance

Financial assistance

Approximately 452 private landowners received more than \$661,000 in cost-share funds to implement beneficial habitatmanagement practices for fish, forest and wildlife resources.

Partnerships

MDC had approximately 60 partnership agreements in FY11 with federal, state and nongovernmental organizations. These relationships helped MDC enhance technical and financial assistance and equipment support to landowners interested in improving fish, forest and wildlife resources. Through the partnerships, we assisted United States Department of

Agriculture with developing and applying \$150 million in Farm Bill conservation programs. We also leveraged staffing, equipment and enhancement funds with partner organizations.

Technical assistance

MDC provided timely and responsive service through approximately 73,519 rural and urban landowner contacts, including more than 5,500 on-site visits. Technical assistance was offered to landowners who wanted help with habitat management plans. Staffers also answered 4,932 requests for wildlife nuisance or damage assistance, including 1,000 on-site visits. A survey completed in 2010 indicated that more than 90 percent of our cooperators were very satisfied with the assistance they received.



Land management

MDC has maintained a high level of active management on MDC lands—especially for quail and grassland birds. During FY11, we conducted habitat management activities on nearly 185,000 acres of public land including 43,000 acres of wetland, 21,000 acres of woodland/forest/savanna, 76,000 acres of cropland (64,000 acres through permittee farmers and 12,000 acres in food plots), 24,000 acres of grassland/prairie, 20,000 acres of old fields and 1,000 acres of glade.

Construction

MDC completed the following major construction projects: Eminence City Park access, Eagle Bluffs Conservation Area (CA) office and draw room, regional office storage at Charles W. Green CA, Kansas City Regional Office, Shepherd of the Hills Fish Hatchery sewage lift station, Lost Valley Fish Hatchery rearing pond underdrain system, Lost Valley Fish Hatchery roof, Powder Valley Conservaton Nature Center HVAC condensing unit, evaporator coil and controls, Jay Henges Shooting Range renovation, Roaring Rivers Fish Hatchery building improvements and Ten Mile Pond CA levee relocation around Blew Hole.

Land acquisition

Approximately 333 acres of land in two counties were purchased, and approximately 1,156 acres in three counties were donated. Acquisitions included an addition to LaBarque Creek Conservation Area that will provide additional protection of the LaBarque Creek watershed, land providing habitat for prairie chickens and the donation of a new conservation area consisting of restorable grasslands, forest and wetlands.



State forest nursery

The state forest nursery annually grows and distributes about 3.5 million seedlings generating \$953,000 in income. The seedlings are planted on both public and private land statewide. The nursery filled more than 9,600 orders involving more than 38,000 packages of seedling trees, with a customer satisfaction rate of more than 99 percent.

Timber harvesters

The Missouri Forest Products Association and MDC sponsor logger training courses about forest-management principles, introducing new techniques and concepts and enhancing safety. Eight workshops were held across the state, training 66 loggers. These 66 join 266 others for a total of 332 trained loggers in Missouri.

Storm-damaged timber

On May 8, 2009, a severe storm impacted the southern half of Missouri. On MDC lands, approximately 13,000 acres were impacted and damaged-timber volume was estimated at 33 million board feet. In FY11, 11 salvage sales were contracted covering 811 acres. To date, 31.9 million board feet have been salvaged, bringing in \$1.9 million in revenue to MDC. Salvage operations on MDC areas were completed in FY11.

Accounting for Department Operations

Listened to Missourians

We conduct a variety of scientifically sound, unbiased and representative efforts each year in an effort to understand public opinions, expectations and recreation participation. This information guides decisions about regulations and fish, forest and wildlife management. In FY10, there were 47 activities that involved 77,834 people. These included surveys, focus groups, public meetings and ombudsman contacts.

Vacancy management

In 2008, MDC anticipated a decline in revenues due to the downturn in the economy. A vacancy management plan was implemented to identify positions that would not be filled as they became vacant. By June 2011, the vacancy management plan had been fully implemented and 174 positions were vacated and held. The vacancy management plan has resulted in a savings of more than \$10 million.

Fiscal Year 2011 Summary

County Assistance Payments—\$1,478,695 Included payments to Missouri's counties for levee and drainage district taxes, forest cropland payments, payments in lieu of real estate taxes and county aid road trust payments. Since 1980, more than \$15.17 million has been paid to Missouri counties in lieu of real estate taxes.

Capital Improvements—\$17,101,172 Work included fish hatchery improvements, river access development, wetland renovations, shooting range construction, nature center improvements, land acquisition transactions and renovation and repair of facilities statewide.

Fisheries—\$12,740,577 Maintained and improved sport fish populations, aquatic biodiversity and aquatic habitats. Managed 944 impoundments and stream areas for public fishing, and provided stream and lake management assistance to 5,679 private landowners. Stocked approximately 8.3 million fish in public lakes and streams.

Forestry—\$14,799,844 Fostered a healthy and growing forest resource. Examples include distributing about 3.5 million seedlings for planting to 9,600 landowners, provided forestry assistance on more than 42,200 acres of private land and to more than 100 municipalities, managing 438,700 acres of public forestland, monitoring insect and disease threats and facilitating development of the state's forest industry.

Wildlife—\$17,095,531 Worked toward ensuring wildlife populations are in harmony with habitat and human enjoyment. Managed more than 525,000 acres of public land and implemented programs to maintain and restore natural communities and wildlife diversity across Missouri's landscape.

Outreach and Education—\$14,389,507 Sustained Missourians' connection to the outdoors through more than 1 million visitors to conservation nature centers and shooting-range/outdoor-education centers, nearly 500,000 subscribers to the Missouri Conservationist magazine, about 80,000 subscribers to the Xplor magazine, Web-based information, grants to schools exceeding \$200,000, conservation curriculums for schools, outdoor skills programs and hunter education.

Private Land Services—\$6,852,347 Helped private landowners to achieve long-term natural resource conservation objectives. Provided service through 31,400 rural and urban landowner contacts; affected 280,155 acres through technical assistance to landowners; provided habitat management workshops to 40,486 attendees; assisted USDA with enrolling 90,000 acres of cropfield reflooding in the Migratory Bird Habitat Initiative; and assisted 5,607 private landowners in controlling nuisance wildlife.

Protection—\$13,860,700 Paid for law enforcement in every county as well as resource management, information, education and public service contact activities conducted by conservation agents who directly contacted more than 660,000 people. Coordinated the Share the Harvest program through which 5,731 deer hunters donated 305,643 pounds of venison to less-fortunate Missourians. Conservation agents, along with 1,800 volunteer instructors, conducted 877 hunter education classes, certifying 22,852 students.

Resource Science—\$10,415,660 Provided the science-based information needed to effectively manage Missouri's natural resources. Resource Science monitors the status of Missouri's fish, forests, plants and wildlife, recommends conservation actions, evaluates these actions and reports the results. In addition to surveys of fish and wildlife, tens of thousands of Missourians were contacted to determine their outdoor activities and opinions about conservation programs.

Regional Public Contact Offices—\$2,827,587 Provided regional public contact offices.

Administrative Services and Human Resources—\$26,420,875 Paid for human resources, hunting and fishing permit point-of-sale and e-Permits system, fiscal services, purchasing, distribution center, print shop, fleet management, vehicle and equipment maintenance centers and information management and technology. Also includes other agency appropriations, Department-wide equipment and other essential services.

Design and Development—\$10,254,894 Provided engineering, architectural, surveying and construction services for conservation programs and maintenance of conservation areas and facilities.

Administration—\$3,163,614 Paid for audits, legal counsel and the coordination of strategic planning, federal reimbursement administration, environmental policy development, cultural resource reviews, public involvement and river basin management.

RECEIPTS

Conservation Sales Tax	\$95,818,337
Permit Sales	\$31,590,358
Federal Reimbursements	\$22,653,214
Sales and Rentals	\$8,825,875
Other Sources	\$2,259,250
Interest	\$303,972
Total Receipts	\$161,451,006

DISBURSEMENTS

County Assistance Payments0.98%
Capital Improvements11.30%
Fisheries
Forestry
Wildlife
Outreach and Education9.49%
Private Land Services
Protection
Resource Science
Regional Public Contact Offices 1.87%
Administrative Services & Human Resources 17.45%
Design and Development
Administration

MISSOURI STATE BUDGET

Health & Social Services
Education
Government Services
Transportation
Natural & Economic Resources2.9%
Conservation0.6%
MDC represents less than 1% of the total state budget
Total State Budget \$24,608,785,560



River Otter

These furry, sleek Missouri residents can be seen running on land or gliding through water.



ONE FRIDAY LAST winter I answered my phone at August A. Busch Memorial Conservation Area and heard the familiar question, "Hey.... got your camera?" I'm fortunate to have a few friends who spot critters for me and I recognized the voice of Shane on the line, the best spotter of them all. Shane had observed a pair of river otters on a nearby frozen lake and he knew I would be intrigued by his discovery. "Are you sure they're not beavers or muskrats?" I asked. "Give me a little

credit," was Shane's reply, making it clear that his information was on the up and up. After work, I rushed home and spent the evening readying my equipment for the weekend, excited to add a new species to my portfolio: the river otter.

The river otter (Lontra canadensis) is a sleek mammal, equally comfortable on land or in water. Its densely furred body is streamlined from head to tapered tail. Both sexes are a rich brown with a silvery throat and muzzle, but the male is larger, weighing up to 30 pounds. They live in streams, rivers and lakes and often reside in abandoned muskrat or beaver dens. River otters can be found throughout most of Missouri. Their favorite food is crayfish but they also feed on fish and other prey. When underwater, for up to four minutes at a time, river otters use their prominent whiskers to locate mussels, frogs and turtles along the bottom.

River otters communicate with a variety of vocalizations but they also make their presence known to each other by leaving droppings and scent markings at common latrine sites. Following courtship and mating, females bear two to five young in late winter that stay with their parents until the following spring. As furbearers, river otters can be trapped in Missouri during the regulated season for their durable pelts. If otters wear out their welcome on private property, for assistance landowners should request this free publication by writing to MDC, Missouri's River Otter: A Guide to Management and Damage Control, PO Box 180, Jefferson city, MO 65102-0180 or email pubstaff@mdc.mo.gov or contact your regional MDC office (see Page 3 for phone numbers).

Early the next morning I sat at the edge of the lake in a stand of scrubby willows, tripod splayed over my lap and lens trained on a small opening in the ice. As the first rays of dawn bathed the frozen surroundings with a soft glow, a glistening creature emerged from the opening and onto the ice. It only took a moment to confirm the species. Shane's information had proven as golden as the morning light. Entranced by my good fortune, it took me a moment to begin photographing the playful otter, and later its mate, as they frolicked and squabbled over breakfast, occasionally glancing at me with icy-whiskered grins. I've never felt more immersed in nature's grace and whimsy. When the action finally lulled, I broke from my hiding spot and headed home to review the images. I reminded myself to thank Shane one last time.

-Story and photo by Danny Brown

To learn more about otters in Missouri, hear audio of an otter or watch a video of an otter, visit mdc.mo.gov/node/262.







Platte Falls CA

Enjoy hunting, eagle viewing, target practice and more at this Platte River area northwest of Kansas City.



START YOUR NEW year with a winter outdoor adventure at Platte Falls CA. Located off I-29 between Kansas City and St. Joseph, the 2,366-acre area features a diverse topography of bottomland, upland timber and old fields. A 9.1-mile, unchannelized stretch of the Platte River also winds through the area. It supports good hunting

for a variety of wildlife, and it also offers rewarding birding, hiking, canoeing, fishing, trapping and target practice.

Platte Falls is archery-methods only for deer hunting, and late-season bow hunters will find good populations of deer. Rabbit hunters who seek out the constructed brush piles will find a fair population of rabbits. Goose hunters can look forward to decent prospects in some of the area's larger crop fields this month.

If the river remains unfrozen, birders have a good chance of seeing eagles fishing over open water. Known as a birding hotspot, the area boasts a list of 146 species, including many kinds of waterfowl, birds of prey, flycatchers, wrens, thrushes, warblers, tanagers and grosbeaks. Plan to return in spring as migrating birds return north from their tropical wintering grounds.

Although there are no designated trails, the area's many access roads and footpaths give you easy access to the river and its associated wetlands. The area also offers use of a kids' fishing pond and pavilion for organized groups with a special-use permit, something to keep in mind when the weather warms up.

If you're up for winter canoeing, try putting in at the Duck's Head, a two-mile meander that nearly meets itself at the duck's "neck." This narrow land bridge between the two deep curves features two parking lots, allowing you to put in and take out at virtually the same location. While you're afloat, consider casting a line for catfish or buffalo.

If winter floating and fishing don't appeal to you, check out the unstaffed disabled-accessible archery sight-in range; the 15-station, walk-through field-archery range; and a shotgun range designated for clay bird target shooting.

If trapping is your thing, call the area manager (the number is listed below) for a special-use permit.

Before traveling, check the area's Web page (listed below) for notices, directions and regulations, and the area map and brochure.

-Bonnie Chasteen, photo by David Stonner

Recreation opportunities: Birding, canoeing, fishing and hiking; hunting for deer, dove, quail, rabbit, squirrel, turkey and waterfowl; target shooting and trapping with a special use permit

Unique features: Boat ramps, pavilions, shotgun and archery ranges, fishable ponds (two acres total) and permanent stream (Platte River)

For More Information

Call 816-858-5718 or visit mdc.mo.gov/a7929.





Hunting and Fishing Calendar

FISHING		OPEN	CLOSE
Black Bass (certain 0	zark streams, se	e the <i>Wildlife Co</i>	de)
		5/28/11	2/29/12
impoundments a	nd other stream	s year-round	
Nongame Fish Giggir	ıg	9/15/11	1/31/12
HUNTING		OPEN	CLOSE
Coyote		5/09/11	3/31/12
Crow		11/01/11	3/3/12
Deer			
Archery		11/23/11	1/15/12
Firearms			
Late Youth	1	1/07/12	1/08/12
Furbearers		11/15/11	1/31/12
Pheasant			
North Zone		11/1/11	1/15/12
Quail		11/1/11	1/15/12
Rabbits		10/1/11	2/15/12
Squirrels		5/28/11	2/15/12
Turkey			
Archery		11/23/11	1/15/12
Waterfowl	please see the Waterfowl Hunting Digest or		
see mdc. i	no.gov/node/3	830	
Wilson's (common) S	nipe	9/01/11	12/16/11
TRAPPING		OPEN	CLOSE

For complete information about seasons, limits, methods and restrictions, consult the Wildlife Code or the current summaries of Missouri Hunting and Trapping Regulations and Missouri Fishing Regulations, The Spring Turkey Hunting Regulations and Information, the Fall Deer and Turkey Hunting Regulations and Information, the Waterfowl Hunting Digest and the Migratory Bird Hunting Digest. For more information visit *mdc.mo.gov/node/130* or permit vendors.

11/15/11

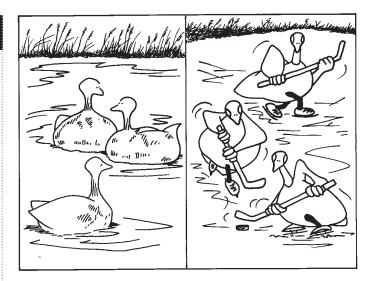
11/15/11

11/15/11

3/31/12

1/31/12

2/20/12



Most geese look for open water.

Canada geese prefer ice.

Contributors



LARRY R. BECKETT is a writer, photographer and videographer from Bentonville, Ark. Born and raised in southwest Missouri, he developed an appreciation for hunting at a young age and enjoys the additional challenge of pursuing game by alternative methods.

MATT CURRY is a private land conservationist in southwest Missouri. Matt is proud to live and work in the Ozarks. After being raised in this part of the world, the hunting, fishing and outdoor experiences he grew up with are now being shared with his wife and children.





BRETT DUFUR, an MDC editor, is writing a history of the Department for its 75th anniversary. He has authored numerous books on Missouri's outdoors including the Katy Trail, wine country and the Lewis and Clark Trail. He lives in Rocheport with his family and loves to paddle the Missouri River and explore wild places.



Beavers & Nutria

Otters & Muskrats

Furbearers

Celebrating 75 years of serving nature and you!

Check our website for 75th anniversary news, videos and events near you.

mdc.mo.gov/node/16137

AGENT NOTES

Resolutions to benefit conservation

JANUARY IS THE time when most of us are reflecting on the past year and making some resolutions for the upcoming year. The most common resolutions generally concern getting into better physical condition. For those of us whose lives revolve around the outdoors, our resolutions might be a little different. If conserving wildlife is important to you, then you might consider some New Year's resolutions to benefit that aspect of your life. Whether it is putting in a new food plot on your hunting ground, building an extra brush pile for rabbits and quail, or adding some recycled Christmas trees to your favorite fishing hole, there are always a few things you can resolve to do to benefit wildlife.

Because most of us do at least part of our hunting and fishing activity on private property, maintaining good ties with the landowner is also a significant resolution. You might consider a thank-you note or greeting card for the landowner whose property you hunt on, or bring them some summer sausage from the deer you killed last year. Any little extra effort on your part can help maintain a good relationship with the landowner.

For those of you who enjoy some outdoor-related travel, you might resolve to save some extra money each week toward that long hunting or fishing trip. Even the old standby resolutions of weight loss and getting in better shape can be a benefit to conservation and your hunting and fishing activities. Building a brush pile, planting a food plot



or hauling Christmas trees are great sources of physical activity. Improving your physical condition will make it easier to hike into your favorite hunting spot and drag out the deer you harvested, and it might even add a few more hunting seasons to your life.

Good luck with your resolutions this year, and I hope at least some of them benefit your outdoor activities and wildlife conservation.

Michael Lancaster is the Protection District Supervisor in the Southeast Region. If you would like to contact the agent for your county, phone your regional conservation office listed on Page 3.





"I Am Conservation"

Logan Rogersville High School's biology teacher, Andrew Kinslow, has been birding most of his life. "One of my earliest memories is of looking through a field guide with my parents on a snowy winter day and matching up birds at the feeder," said Kinslow. "I remember being amazed at all the different types of birds and fascinated with the idea of flight." This love of birding led Kinslow to intern with Missouri Ozark Forest Ecosystem Project, MOFEP, while in college. "I learned bird songs, nest location techniques and bird banding through this program," said Kinslow. "After that, I was hooked on birding and research. The next two and a half years saw me in seven different states working on any type of bird research job I could find. It was while doing a public program during one of these jobs that Kinslow discovered his love for teaching. In 1999, he started a summer birding research program at his school. Ten kids participated in the program the first summer, and it has grown each year since. "Involving students is an integral part of birding to me," said Kinslow. "It takes science out of the cookbook lab activity world and can hook a kid on science and birds for the rest of their lives." —Photo by David Stonner